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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/522,725	09/22/2005	Yuuichi Kanayama	1417-495	8472

23117 7590 11/26/2008
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EXAMINER	
FRANK, NOAH S	
ART UNIT	PAPER NUMBER
1796	
MAIL DATE	DELIVERY MODE
11/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/522,725	KANAYAMA ET AL.	
	Examiner	Art Unit	
	NOAH FRANK	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4,5 and 9-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4,5 and 9-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/19/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 4-5, and 9-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear if amended claim 1 is an improper Markush group. In addition, it is unclear where resin [A] ends, as it appears that everything after "or a mixture of" could be a second alternative. Punctuation is needed to separate the inorganic pigment limitation from the second alternative.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims Claims 1, 4-5, 9-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. (JP 2000-256529) in view of Sliwinski et al. (US 6,454,848).

Considering Claims 1, 4-5, 17-23: Matsumoto et al. teaches a light-resistant rubber-reinforced styrenic resin composition comprising 100 parts by weight of a dienic

rubber-reinforced styrenic resin and 4 to 20 parts by weight of a pigment (Abs). Matsumoto teaches using 27 wt% of the rubber polymer (Abs).

Matsumoto does not teach the inorganic pigment being an oxide containing at least two elements selected from the group consisting of Fe, Cr, and Mn and having an infrared-reflecting property. However, Sliwinski et al. teaches inorganic pigments including a host component and guest component comprising one or more elements from the group consisting of aluminum boron, chrome, cobalt, iron, manganese, nickel, tin, and zinc (Abs). Solid solutions are formed by mixing metal oxides which contain the host and guest components (Abs). When multiple guest components are used, a representative ratio is 0.94:3.35:0.83 (5:40-45). Example 1 teaches a Cr/Fe pigment (5:40-45) and Example 8 teaches a Cr/Mn pigment (6:25-30). Sliwinski also teaches that one would reasonably expect that since iron and chrome have similar lattice constants, they would be interchangeable (4:20-35). Therefore, Sliwinski also teaches a Fe/Mn pigment.

Matsumoto and Sliwinski are combinable because they are concerned with the same technical difficulty, namely IR-reflective pigments. At the time of the invention a person of ordinary skill in the art would have found it obvious to have used the pigments, as taught by Sliwinski, in the invention of Matsumoto, to impart near infrared reflectance, resulting in lower heat build-up (2:55-60 of Sliwinski).

Matsumoto does not teach the claimed temperature rise. The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients.

Therefore, the claimed effects and physical properties, i.e. a temperature rise of not less than 50°C would implicitly be achieved by a composite with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claims 9, 11, 24, 26: Matsumoto teaches using 6 parts by weight of titanium oxide, a white pigment (Abs).

Considering Claims 10, 25: Matsumoto does not teach the claimed limitatations. The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. an L value of less than 40 would implicitly be achieved by a composite with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claims 12-13, 27-28: Matsumoto does not teach the inorganic pigment [C] being a green-based pigment of a white and blue-based pigment. However, it is submitted that changing pigment colors is common practice. At the time of the invention a person of ordinary skill in the art would have found it obvious to have used green or white and blue-based pigments, to impart color to the final product.

Considering Claims 14-15, 29-30: Matsumoto does not teach the claimed limitatations. The Office realizes that all of the claimed effects or physical properties are not positively stated by the reference(s). However, the reference(s) teaches all of the claimed ingredients. Therefore, the claimed effects and physical properties, i.e. an L value of not more than 40 and maximum reflectance of not less than 15% would implicitly be achieved by a composite with all the claimed ingredients. If it is the applicant's position that this would not be the case: (1) evidence would need to be provided to support the applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties with only the claimed ingredients.

Considering Claims 16, 31: Matsumoto teaches the composition useful as a molding material (Abs).

Response to Arguments

Applicant's arguments filed 8/19/08 have been fully considered but they are not persuasive.

In response to applicant's arguments that Sliwinski does not teach the claimed pigment, Sliwinski states that, "It should be noted that Table 1 does not contain all of the possible compounds that can form solid solutions according to the present invention" (4:20-25). Therefore, Sliwinski teaches many more compounds than are listed in table 1, including the compounds of the claimed invention, as set forth above.

In response to applicant's arguments that there is no motivation to combine the pigment of Sliwinski into the resin of Matsumoto, Matsumoto teaches that the composition comprises 4 to 20 parts by weight of a pigment (Abs). Sliwinski teaches pigments that impart near infrared reflectance, resulting in lower heat build-up (2:55-60 of Sliwinski). They are functional equivalents, with the added benefit of a lower heat build-up.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NOAH FRANK whose telephone number is (571)270-3667. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

NF
11-13-08